grey, passing into white near the tip, and broadly margined with black; lesser wing-coverts grey; greater coverts grey at the base, passing into black about the middle of the feathers, beyond which they are creamy white; primaries very dark or blackish brown; lower part of the throat and all the under surface pale buff; sides of the breast and the whole of the flanks down to the tail deep rich buff, with two narrow irregular crescentic bands of blackish brown on each feather, one within the other, the outer one near the edge, the inner one near the middle; a similar style of marking pervades the space behind the legs, the lower part of the back, and the upper tail-coverts, but the markings in those parts are wider, of a greyer tint, and intermingled with each other; tail greyish brown, the central feathers freckled on their margins with greyish white.

Total length 23 inches; bill $2\frac{3}{4}$; wing 10; tail $4\frac{1}{2}$; tarsi 2.

Hab. China.

Remark.—The above description was taken from an example which I consider to be either immature or in its winter livery. In size it is intermediate between *Mergus castor* and *M. merganser*. Whenever a specimen is procured in its nuptial dress, it will doubtless prove to be a bird of great beauty. This new species is at once distinguished from the other members of its genus by the squamate form of the markings on the flanks, which has suggested the specific name assigned to it.

May 10, 1864.

Dr. E. Hamilton in the Chair.

The following papers were read:—

1. On a New Rat from Formosa. By Robert Swinhoe, F.Z.S.

Mus coninga, n. sp.

M. *corpore supra rufo, setis nigris spinosis sparso, subtus abrupte albo: auribus rotundis, fuscis: cauda longa, squamosa, setosa: pedibus albis.*

Corp. long. 8 poll., caud. 9 poll.

Upper parts reddish brown, sprinkled with stiff black bristles, more especially on the back, where the fur is also often a little dark; ears and fore part of legs deep brown; tail composed of short rings of scales set with short stiff bristles, deep brown on its upper parts, whitish on the lower and for about $1\frac{3}{4}$ inch of tip; a ring of black runs round the lids of the eye; whiskers on sides of muzzle and a few hairs on sides of the forehead very long and glossy black; fore teeth rufous sienna, those on lower jaw long; chin, breast, under

fore paws, belly, and under thighs pure white; paws white, the hinder ones large.

In a young animal, measuring 6½ inches in trunk, the tail measured 6 inches; head to fore root of ear 1½ inch; between ears ·7 inch; length of ear ·8 inch; greatest breadth of ear ½ inch; hind foot, from tibial joint to end of nails, 1·4 inch. As the animal attains its full size, the tail exceeds the trunk in length. I have examined about thirty-five specimens of different ages; the younger the animal, the fewer spinous bristles: of these the males carry most; they are sharp and very stiff. Amongst these specimens there is, as usual, an amount of variation; but in proportions it is not very appreciable, except in so far as to be accounted for by age. In colour, on the contrary, varieties abound: the most strongly marked are the following:—

1. Sides strongly freckled with olive-yellow.
2. Brown, with more or less reddish; fur softer, with few bristles.
3. Similar to 1, but with brown instead of white fur.
4. Similar to 1, with white and brown feet and white-patched tail.
5. Characters of nos. 2 and 1 united.

These five varieties are so linked together by intermediate forms that there is no drawing a line between them. When I received the first soft-furred brown Rat, I thought I had got a distinct creature; but I soon procured others combining the characters of both. The colour and softness of its fur led me to conjecture that it might be a race of which the ancestors had hybridized with *Mus decumanus*, because I received a specimen of this last animal from the same locality. But the acquisition of further specimens showed me that, from the unsullied whiteness of its belly and the intermediate tinges of the upper parts of many others, the difference only consisted in a slight variation in the colour and appearance of the fur, the other characteristics of the species remaining unaltered. This Rat is not now found in the vicinity of towns, whence, like the indigenous Rats of most countries, it has fallen back before the usurpation of the stronger hordes of the commercial Rat (*Mus decumanus*); and it is now only found in the isolated hamlets of the interior, whither its enemy appears gradually to be extending its sway. It is difficult to understand how so large and strong a Rat has been ousted out of its rights by a not much stronger usurper. This species must have occurred formerly in towns in pretty considerable numbers, as it still does in country places. The imported hordes of *Mus decumanus* could not have been in larger numbers, but I should fancy must have employed a superior cunning to deprive these of their territory—much the same sort of advantage, probably, that civilization gives the Chinaman in this country, and the whites in Australia, which enables them to drive into the mountains and bush the rightful but less expert possessors of the land of their fathers. This Rat is allied to the aboriginal Rat of Southern China (*Mus flavescens*, Gray), and doubtless of the same stock; but it attains a larger size, is robuster, has larger hind feet, larger ears, and is otherwise distinguished by its

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CACATUA DUCORPSII

feet being white, and by the pure abrupt white of its under parts. The bristles of its upper parts are also more numerous and more spinous. It was, perhaps, originally brought over by Chinese junks, and drove before it some other species, of which some few may yet be found lingering about the huts of the savages of the interior. For, in former days, before the accession of western commerce, *M. flavescens* was doubtless the chief Rat of the towns of Southern China; and special circumstances may have caused it to vary; or its pedigree may perhaps be carried further back to the time when there must have been more territorial connexion between this island and the main, when *Lepus sinensis*, *Cervulus reevesii*, and others managed to get across and remain to this day in either country identical and unchanged in form. These, however, are merely conjectures; but the facts remain that *Mus coninga* is allied to *M. flavescens*, and that both have been banished from their accustomed haunts by the cosmopolite usurper, *M. decumanus*.

The Formosan Rat is distinguished by the Chinese colonists from *M. decumanus*, which they call *Laou chee*, by the name *Pay-ba*, or white belly. The country-people attribute medicinal properties to its flesh, and value its carcase at fourpence a piece. I propose to name the animal after the powerful pirate chief who seized the island from the Dutch, and whose nightly rest this indigenous species must have as greatly disturbed as do its commercial successors those of the present trading community.

2. On a New Species of White Cockatoo living in the Society's Gardens. By P. L. Sclater, M.A., Ph.D., F.R.S., Secretary to the Society.

(Plate XVII.)

In April of the year before last the Society obtained from the ship 'La Hogue' (as recorded in the 'Proceedings' for May 13, 1862)* a pair of a fine large species of White Cockatoo, new to the collection. Somewhat influenced, I must confess, by the information that they had been brought to Sydney from the Salomon Islands, I was induced to refer these birds to the *Cacatua ducorpsii*, obtained by MM. Hombron and Jacquinot in that group of islands, and described by those naturalists in the Zoology of the 'Voyage au Pôle Sud,' although they did not quite agree with the characters and figure there given of that species.

On its return voyage this year the same ship has brought over a pair of smaller White Cockatoos, received at Sydney from the island of Guadalcanar, of the Salomon group. As soon as I saw them, I was at once convinced that I had made a mistake in referring the former pair of birds to *Cacatua ducorpsii*, and that the latter pair were rightfully entitled to that designation. It thus becomes neces-

* See P. Z. S. 1862, p. 141.

sary to give a new name to the Cockatoo which I have heretofore erroneously called *ducorpsii*, and figured under that name in the 'Proceedings' for 1862. I propose, therefore, to call it *Cacatua ophthalmica*, as its most distinguishing characteristic when living is the blue naked skin which surrounds the eye, and renders it at first sight distinguishable from every other bird of the genus.

Before giving the specific characters of this new species, I may remark that the White Cockatoos, of the genus *Cacatua*, may be divided into two very easily distinguished sections. The first embraces those species which have a narrow medial head-crest, with the slender point recurved at the extremity, and appearing above the surface of the adjoining feathers when the crest is in a state of repose. The second contains those species which have the crest broadened and comprising the greater part of the head-feathers, rising when erect into a sphere more or less pyramidal in shape, but showing when in a state of repose no recurved point. The following diagnoses may assist in determining the species :—

Sect. A. *Crista angustata ad apicem recurva.*

Majores candidæ, crista flava	1. *galerita*, ex Australia.
	2. *triton*, ex Nov. Guinea et Molucc.
Minores candidæ, crista aurantiaca	3. *citrinocristata*, ex Timor.
crista flava	4. *sulphurea*, ex Timor, Flores, Lombock et Celebes.
	5. *æquatorialis*, ex Nov. Guin. et Molucc.
Major, crista tricolore	6. *leadbeateri*, ex Australia.

Sect. B. *Crista lata incumbente.*

Candida major; crista alba	7. *cristata*, ex Ternate.
crista rubra	8. *moluccensis*, ex Ceram, Batchian et Ternate.
crista limonacea	9. *ophthalmica*, ex ins. Salomon.
minor; crista alba, intus limonaceo tincta	10. *ducorpsii*, ex ins. Salomon.
genis rubro tinctis	11. *sanguinea*, ex Australia.
crisso rubro	12. *philippinarum*, ex ins. Philipp.
Rosacea	13. *roseicapilla*, ex Austral.

The new species may be shortly characterized as follows :—

Cacatua ophthalmica, sp. nov.

Cacatua ducorpsii, Sclater, P. Z. S. 1862, p. 141, pl. xiv.

Alba : cristæ plumis elongatis, intus pallide limonaceis : subalaribus et caudæ tectricibus inferioribus limonaceo tinctis : rostro et pedibus nigris : annulo oculari in ave viva cæruleo : crassitie vix minore quam in Cacatua cristata.

Hab. In ins. Salomon.

In conclusion I may remark that the Society's living series of Cockatoos contains examples of nine out of the thirteen known species, the deficiencies being only four, namely, *C. triton*, *C. sulphurea*, *C. sanguinea*, and *C. philippinarum*.

J. Wolf, del. et lith.

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